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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767,383	01/22/2001	Martin Wahl	GR 00 P 1119	2399

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10/29/2003

LERNER AND GREENBERG, P.A.
POST OFFICE BOX 2480
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EXAMINER

CHOW, CHARLES CHIANG

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 10/29/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/767,383

Applicant(s)

WAHL, MARTIN

Examiner

Charles Chow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7-9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Detailed Action

Priority

1. It is acknowledged that applicant is claiming the foreign priority benefit from document, Germany 100,02,523.4, filed 01/21/2000.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamura et al. (US 4,709,404) in view of Tsukada (US 4,267,467).

Regarding **claim 1**, Tamura et al. (also as Tamura in below) teaches a circuit configuration for controlling the transmitting power of a battery-operated transceiver; the control circuitry having battery voltage detector 9 for battery voltage V (abstract, Fig. 9-10, col. 4, line 25 to col. 5, line 11); the gain control circuit 700 (Fig. 10, abstract); the automatic gain control AGC of the power amplifier 4 for radio communication device (abstract; col. 1, lines 8-12; col. 1, lines 29-42); a battery for providing a supply voltage (Fig. 4, battery-V supplies power to power amplifier 200;

Tamura teaches a power stage (power amplifier 4) having controllable amplification of a radio frequency signal, having a gain; the AGC 500 for controlling of the gain of the power amplifier 4 (Fig. 4; col. 3, 28-32).

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Tamura teaches a comparison device having an input side for receiving a reference signal and a signal coupled to the supply voltage, having an output side for supplying a difference signal. Because Tamura teaches the comparator 19, for comparing the sampled voltage via resistor divider 11-12 to the non-inverting terminal of 19 and the sampled voltage from resistor divider 13-14 to the inverting terminal of differential comparator 19 (figure in cover page; col. 4, lines 25-53). Tamura teaches the comparator 19 has output 27 for supplying the difference signal from the inverting/non-inverting terminals (figure in cover page).

Tamura does not clearly teach the independence on the difference signal for controlling the gain of the said power stage, although Tamura teaches the controlling of the gain of the amplifier 4, by comparing the feedback detected power from power amplifier 4 output (at power detector 6), with the summed, gated, voltage V_s (at resistor 22, figure in cover page) to terminal 28 (figure in cover page, col. 4, lines 29-53), to override the signal from terminal 27 (cathode of diode 20, figure in cover page), by applying a V_s constant voltage.

However, Tsukada teaches the controlling of the gain of the amplifier by turning off battery supply of a electronic device, radio or the like, by delaying the turning off of the battery's supply (abstract, figure in cover page), to shut off battery supply to the device (col. 1, lines 6-12, col. 1, line 41 to col. 2, line 4). Tsukada teaches an improved technique for delaying of the turning off the supply to electronic device 18 with a timer 10 (figure in cover page, Fig. 3-4; col. 1, lines 14-48), such that the shutoff of the battery supply is independent of the battery voltage (col. 1, lines 45-48). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Tamura, and to include Tsukada's shutoff

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battery supply independent of battery voltage, such that the battery could be turned off with accurate delay from a timer.

Regarding **claim 2**, Tamura teaches the control device including a logic element (diode 20, figure in cover page) for generating difference signal from constant reference voltage V_s and the output at terminal 27 (cathode of diode 20), for supplying output to terminal 28 at anode of diode 20 (figure in cover page) for controlling the gain of power amplifier 4, via differential comparator 26.

Regarding **claim 3**, Tamura teaches the voltage divider via resistors 11-12 (figure in cover page) connected to battery supply V and connected to the non-inverting input of the comparator 19 via resistor 17.

Regarding **claim 4**, Tamura teaches the measuring device 6/600 for measuring the power output from the power amplifier 4 (figure in cover page, Fig. 9-10). Tamura teaches the comparison device (26, Fig. 9, resistor 25) for coupling detected power for comparing the the signal from the logic element (diode 20), for gating signal from terminal 27 or gating signal from V_s , for controlling the power of the power amplifier 4.

Regarding **claim 5**, Tamura teaches the directional coupler 41, 42, (600 in Fig. 10) having detecting diode 40, and resistor 33 for connecting between coupling element 40 and an input of the comparator 35.

Regarding **claim 6**, in applicant's page 10, line 9, the coupling element 45 is performing the gate function. Tamura teaches the coupler 42 (Fig. 10) has a detecting diode 40 (Fig. 10) connected to the gate of the coupling element 42.

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Regarding **claim 7**, In the above, Tsukada has shown the teachings (in claim 1) for a digital operating function unit for generating switch off signal to turn off electronic device with a timer delay, which is independent of the battery supply voltage.

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tamura in view of Hewitt (US 5,095,308).

Regarding **claim 8**, Tamura teaches the circuit configuration for controlling transmitting power of a battery operated radio communication apparatus. Tamura has shown the teachings for the providing a supply voltage, a power stage for controlling amplification of a radio signal having gain, a comparison device for receiving a reference signal, and a signal coupled to the battery supply voltage for outputting difference signal. Tsukada has shown above the teachings for the independence on the difference signal for controlling the gain of the said power stage, in a electronic device, radio or the like.

Tamura does not clearly teach mobile telephone.

Hewitt teaches the mobile telephone as the radiotelephone or cordless telephone (col. 1, lines 6-10; col. 2, lines 38-43). Hewitt teaches the economic, simple, battery saving technique for automatically cuts off battery power supply of a radiotelephone or cordless telephone for saving battery power, independent of user procedures, to prevent battery discharging (abstract, figure in cover page; col. col. 2, lines 27-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Tamura above, and to include Hewitt's battery saving for a radiotelephone by cutting off the battery supply, such that the system could, simply and economically, save radiotelephone's battery supply.

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Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. US 6,018,232, January 2000, Nelson et al. teaches the radio modem of a battery powered portable computer, having circuitry for controlling the transmitting power of the power amplifier 102 (abstract, figure in cover page).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Chow whose telephone number is (703)-306-5615.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (703)-305-4385.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: (703) 872-9306 (for Technology Center 2600 only).

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



Charles Chow

October 08, 2003.



10/20/03

**QUOCHIEN B. VUONG
PRIMARY EXAMINER**